

REMARKS/ARGUMENTS

Claims 1, 6-11, and 13-81 remain in the case.

Claims 19 and 39 are amended.

Claims 1, 6-11, 14-15, 77-78, and 81 are rejected under 35 U.S.C. §102(e) as being anticipated by Forin (US 6,594,701).

Claims 13, 16-27, 29, 31-45, 47-65, 67-76, 79 and 80 are rejected under 35 U.S.C. §103(a) as being unpatentable over Forin in view of Dunning et al. (US 6,683,850). Dunning et al. is cited for its showing of negative acknowledgements.

Claims 8, 28, 30, 46 and 66 are rejected under 35 U.S.C. §103(a) as being unpatentable over Forin in view of Dunning et al. (US 6,683,850) further in view of Cheriton et al. (US 6,724,721). Cheriton et al. is cited for allegedly teaching transmitting a predetermined number of credits from said receiving node to said sending node when said counter is equal to at least a predetermined value and decrementing said counter by the number of credits transmitted.

Forin teaches a system wherein credits issued by a receiver are used to control transmission of data from a transmitter to a receiver. However, Forin specifies only the number of bytes that may be transmitted and do NOT identify a particular range of bytes in a data stream. A range is defined as an interval, and thus requires definition of begin and end, and therefore at least a pair of parameters. The Examiner states that Applicants fail to distinguish the “information defining a unique range of data” from the credits of Forin. In fact, the presently claimed invention is indeed distinguished, as follows:

Claim 1 provides as follows:

(a) initially transmitting first information defining a first unique range of data from a receiving node to a sending node, said first information authorizing transmission of a first quantity of data from said sending node represented by a quantity of data within said first unique range of data of a data stream; ...

(c) transmitting second information defining a second unique range of data from said receiving node to said sending node when an event occurs, said second information authorizing transmission of a second quantity of data from said sending node represented by a quantity of data within said second unique range of data of said data stream”.

Because of the maxim of claim interpretation that no single element can be double counted, the present invention according to claim 1 requires that the information transmitted define two distinct parameters: (1) the unique range of data; and (2) the quantity of data within that unique range. Because the ranges are “unique,” meaning two ranges are not the same, this

distinguishes a system in which the parameter communicated is merely a size. The relationship between a range and a size is that a size has a lower limit which is constrained to always be zero. On the other hand, according to the present invention, the range and amount are separate and non-trivial parameters.

The Examiner exposes the defect in his analysis as follows: “The credit message of Forin specifies the size of the buffer 78(a), in this case 3 bytes of data.” 3 bytes is an amount of data, and nowhere does Forin teach a separate parameter that corresponds to applicant’s “range”. Even if the credit message is interpreted to correspond to the “range” of applicants’ claims, the “amount”, and additional piece of information required by the claims, is not separately communicated. Applicants’ claims require that two separate pieces of information be communicated, (1) a unique range of data and (2) a quantity of data, while Forin teaches the sending of only a single parameter, a “credit message” which is a single scalar quantity. Therefore, the Examiner has failed to establish anticipation of the claims, since a material element, the advantages of which are taught in applicants’ specification, is absent from the reference.

Forin, on the other hand, communicate “credits indicative of receive buffer sizes...”, and thus do not purport to communicate ranges. Indeed, Forin does suggest that multiple parameters may be transmitted—however, these are multiple buffer sizes, and not datastream ranges:

According to another aspect, the present invention includes a method for controlling data flow between a sender and a receiver. The method includes communicating a first credit list to a sender. The first credit list may include a plurality of credits indicative of buffer sizes of receive buffers accessible by the receiver and capable of receiving data from the sender. In response to receiving the first credit list, the sender transmits a data packet to the receiver. The data packet is no greater in size than a first buffer size specified by a first credit in the first credit list.

Col. 4, line 62-Col. 5, line 4.

A “unique range” distinguishes a simple quantity in that a range requires a defined beginning and end, which can be expressly or inferentially defined, but the respective unique ranges cannot be coextensive. Thus, a message which always infers the same begin (0) and the same amount (3) does not specify “unique” ranges.

Claim 39 is similarly distinguished. Claim 39 provides, *inter alia*:

“a) means for transmitting a range of data of a data stream from a sending node to a receiving node, said range of data being specified by a range of data credits present at said sending node;

b) means for transmitting a number of data credits specifying the range of data of

said data stream from said receiving node to said sending node upon occurrence of at least one event".

In this case, the range of data, e.g., the interval, is communicated by the first means from the sending to receiving nodes, while the second means communicates a number of data credits.

Claims 19 and 57 are also likewise distinguished. Claim 19 requires, *inter alia*:

"(i) transmitting credits from a receiving node to a sending node responsive to occurrence of an event, said credits specifying a unique range of data to be transmitted;

(ii) transmitting a specified unique range of data of a data stream from said sending node to said receiving node, corresponding to a range of data specified in credits received by said sending node from said receiving node".

Claim 57 provides:

"b) a first transmitter for transmitting an amount of data of a data stream from a sending node to a receiving node, corresponding to a range of data specified by credits present at said sending node, if said predetermined identifier indicates implementation of a credit and negative acknowledgement transport system;

c) a second transmitter for transmitting credits from said receiving node to said sending node when a predetermined event occurs, said credits specifying a range of data sought to be received; and for transmitting a negative acknowledgement from said receiving node to said sending node, when at least one transmitted datum is lost or corrupted."

It is therefore respectfully submitted that the primary reference is deficient in a material element of the claims, and that this deficiency is not remedied by the secondary references.

Applicants believe that claims 1, 6 - 11, and 13 - 81 are allowable and therefore respectfully request that the application be allowed.

Respectfully submitted,



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